Bruhat Bangalore Mahanagara Palike
Executive Engineer Chikkapete Division

ame of Work:Drilling OF Borewell in Chowdeshwari ward No-02 of Yelahanka Sub Division

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	**Geophysical investigation** at site for sinking borewells for supplying drinking water to the habitation either through the Hand Pump MWS or P.W.S.S, by vertical electrical sounding by adopting Venner orSchlumbergers's method, including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity, its quality, quantity and acceptability of the users, indicating the location of the site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instruments and accessories to work site, engaging technical personal and labour required etc. NOTE: 1) Additional rate on item 1&2 is allowed for drilling in over burden and fixing Casing pipes beyond 20 M (for fixing Casing pipes only) a) Above 20 M and upto 30 M - 15%, b) Above 30 M - 30% (Measurement of overburden is restricted to the depth of casing pipe fixed excluding initial depth of 20M and projection above ground level). 2) A sum of Rs. 100/- is to be deducted for Dry Borewell towards yield test. (P.151, I.No-4 Code No-O040A) BWSSB.SR 2021-22								
	Basic Rate	5141.0							
	Area Weightage 10%	514.10							
	Total	**5655.10**							
		2				**2.00**	**Nos**	**5655.10**	**11310.20**
2	**Sinking of Borewell of 165mm dia** clear using super fast hydraulic rig of capacity 300 PSIG & above 1100 CMF & above in all strata including over burdern upto 20 m. Fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding cost of casing pipes, collars, cap etc., complete)(P.151, I.No-1) BWSSB.SR 2021-22								
	Basic Rate	290.00							
	Area Weightage 10%	29.00							
	Total	**319.00**							
	0 to 50 m (Code No-O010A)	2	50.00			**100.00**	**m**	319.00	**31900.00**
	Basic Rate	364.00							
	Area Weightage 10%	36.40							
	Total	**400.40**							
	50 to 100 m (Code No-O010B)	2	50.00			**100.00**	**m**	400.40	**40040.00**
	Basic Rate	387.00							
	Area Weightage 10%	38.70							
	Total	**425.70**							
	100 to 150 m (Code No-O010C)	2	50.00			**100.00**	**m**	425.70	**42570.00**
	Basic Rate	449.00							
	Area Weightage 10%	44.90							
	Total	**493.90**							
	150 to 200 m (Code No-O010D)	2	50.00			**100.00**	**m**	493.90	**49390.00**
	Basic Rate	527.00							
	Area Weightage 10%	52.70							

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Total	579.70							
	00 to 250 m (Code No-O010E)	2	50.00			100.00	m	579.70	57970.00
	Basic Rate	558.00							
	Area Weightage 10%	55.80							
	Total	613.80							
	250 to 300 m (Code No-O010F)	2	50.00			100.00	m	613.80	61380.00
	Basic Rate	620.00							
	Area Weightage 10%	62.0							
	Total	682.00							
	300 to 350 m (Code No-O010G)	2	50.00			100.00	m	682.00	68200.00
3	Supply of ISI mark 175mm nominal bore,plain and steel casing pipe grade of steel Fe 410 of wall thickness conforming to IS 4270-2001 and latest ammendments, electrical resistance welded steel tubes, material and conforming to IS 1387-1993 and manufactured by basic open hearth electric or basic oxygen process in random length of 5-7m both ends.threaded conforming to IS 554-1985 one end fixed with socket conforming to IS 4270-2001 and the other end with screwed pipes all shall be responsibaly free from defects. The tubes shall be responsible straight end should be with ISI marking weighing 25.10kg/m.prices include Collar-Medium duty (P.154, I.No 32, O160A) BWSSB.SR 2021-22								
	Basic Rate	1933.0							
	Area Weightage 10%	193.3							
	Total	2126.30							
		2	60.00			120.00			
						120.00	Rmtr	2126.30	255156.00
4	Supply and delivery of galvanized mild steel tubes of 6mtr standard length heavy duty (C Class) as per IS 1239 (Part-I) 1990 with latest amendments with ISI Mark (one end fitted with Heavy Duty collar and other end fitted with protective cover) 50 mm (P. No.162, I. No. 33.1 BWSSB SR 2021-22)								
	Basic rate	3050.00							
	Area Weightage 10%	305.00							
	Total	3355.00							
		75				75.00			
						75.00	Each	3355.00	251625.00
5	PVC pipe - OD 250mm and 6 Kg/sqcm P.No-34, Sl.No.1175,BWSSB.SR 2021-22								
	Basic rate	1100.00							
	Area Weightage 10%	110.00							
	Total	1210.00							
		2	6.00			12.00			
						12.00	Rmtr	1210.00	14520.00
6	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper withflexible copper with low resistance conductor confirming to13:8130-1984 and virgin grade PVC insulation and powdercoating extruded PVC sheathed suitable for working voltageupto 1100 V as per IS-694:2010. 3C x 6 mm2 P. No. 4/ I No. 2.6.4 KPWD Electrical SR 2021-22								
	Basic rate	242.00							
		2	620.00			1240.00			

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
						1240.00	Mtr	242.00	300080.00
	Providing,supplying to work site, Submersible Pump Set of 150mm dia suitable for bore well and confirming to IS 8034-2000;3Phase, SS Bowl & Impeller with Low volt Motor as per specifications,as per necessary ammendments and instructions of engineer incharge of work. 15.00 HP - 120 LPM @ 266 m = 23 STG Outlet Dia - 2.00"(P. No.161, I. No. 18.6, BWSSB SR 2021-22)								
	Basic rate	69258.00							
	Area Weightage 10%	6925.80							
	Total	76183.80							
		2				2.00			
						2.00	Nos	76183.80	152367.60
8	Earthing: Supplying and fixing and wiring earth electrode for grounding circuits IC cutouts and other equipments on the meter board in the pit. The pits should be filled up with equal proportion of salt and charcoal 150mm around the pipe to complete depth. The connection from the pipe to the conduits etc. is to established through GI wire of sizes as per clause 7.3.3 of IS 732 using 12mm bolts, nuts, washers and check nuts, the pipe shall have 16 through holes of 12mm dia. (P. No.164, I. No. 45, BWSSB SR 2021-22)								
	Basic rate	3750.00							
	Area Weightage 10%	375.00							
	Total	4125.00							
		2				2.00			
						2.00	job	4125.00	8250.00
9	Supply and fixing polished wood board made of not lessthan 15mm thick plank on both sides of not more than 2pieces and fixing the same to the wall using tapered invertedwooden plugs screws. 20" x 20" x 2.5" (P No. 10 No.5.6.6,Part-I Electrical SR 2021-22)								
	Basic rate	315.00							
		15				15.00			
						15.00	Each	315.00	4725.00
10	Supplying & fixing of Porcelain fuse channel with cut out onexisting wooden/panel using necessary nuts, bolts andwashers. 63 A (P No. 10 No.5.6.6,Part-I Electrical SR 2021-22)								
	Basic rate	372.00							
		12				12.00			
						12.00	Each	372.00	4464.00
11	Supplying & fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materialsand 'C' Type curve, indicator ON/OFF, energy cross-3 withShort circuit breaking capacity of 10K and complete wiring asrequired confirming to IEC 60898. 50-63 A TPN (P No. 13 I.No.5.17.9,Part-I Electrical SR 2021-22)								
	Basic rate	2399.00							
		12				12.00			
						12.00	Each	2399.00	28788.00
12	**Earth work excavation by manual means** for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work.Loading and Unloading of Stone Boulder/Stone aggregates/ Sand/Kankar/Moorum. (Tipper 14 m3) (V-I.No 1.4.Page No-5 PWD SR 2021-								

	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Basic Rate	186.00							
	Area Weightage 10%	18.60							
	Total Rate	**204.60**							
	Pipeline	2	360.00	0.75	0.60	324.00			
						324.00	Cum	**204.60**	**66290.40**
	Supplying and filling in plinth with sand under floors, foundation of Bridges including watering, ramming, consolidating and dressing complete. (P.No-7, I No-1.11,V-I of PWD SR 2021-22)								
	Basic rate	2177.00							
	Area Weightage 10%	217.7							
	Total	**2394.70**							
		2	360.00	0.30	0.30	64.80			
						64.80	Cum	**2394.70**	**155176.56**
	Supplying PVC ringtite pipes conforming to IS 4985:2000 with latest amendments and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading unloading at both destinations and cuts of pipes wherever necessary including jointing of PVC pipes and specials (excluding cost of specials) with jointing of approved type, with all labour with all lead & lift including encasing the pipe alround to a depth of not less than 15 cms. with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (Contractor will make his own arrangements for procuring water for testing) etc.63mm outer dia, 6kg/sqcm & class 3 for:(P. No.134 I No 1.4 BWSSB SR								
		153.00							
		2	360.00			720.00			
						720.00	Mtr	**153.00**	**110160.00**
5	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m , and lift upto 1.5 m. Including cost of all labour complete as per specifications P. No. 7, I No. 1.10,V-I PWD SR 2021-22								
	Basic rate	122.00							
	Area Weightage 10%	12.2							
	Total	**134.20**							
		2	360.00	0.75	0.40	216.00			
						216.00	Cum	**134.20**	**28987.20**
8	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density (V-III, P.No-24,I No-4.27A)of PWD SR 2021-22).								
	Basic Rate	**2394.00**							
	Area Weightage 10%	**239.40**							
	Total Rate	**2633.40**							
	For Borewell								
		2	360.00	0.75	0.225	121.50			
						121.50	Cum	**2633.40**	**319958.10**
20	Supplying fully automatic star-delta starter unit push buttontype with suitable wires, 3 contactors, one adjustablethermal timer mounted on a common base plate held in steel enclosure for use on 400/440 V 3 phase and wired after fixingto the existing wooden board for motor. Above 12.5 HP upto 25 HP (P No. 10 I.No.5.2.2.Part-I Electrical SR 2021-22)								
		8640.00				2.00			
		2				**2.00**	Nos	**8640.00**	**17280.00**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
							Total Construction Cost	2080588.06
							18% GST for Construction Cost	374505.85
							BESCOM Deposite Charges	42,000.00
							Sub Total	2497093.91
							Utility Shifting,Miscellaneous and Rounding off	2,906.09
				GRAND TOTAL				2500000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2021-2022, issue rates dated 07-07-2022 and Data Rates

Assistant Engineer
Ward No-02
BBMP Bangalore

Asst. Executive Engineer,
Yelahanka Sub Division
BBMP Bangalore

Executive Engineer,
Chikkapete Division
BBMP Bangalore

Administrative Approval

Accorded For ..25.00 Lakhs.
Head of A/C....P-3796...
CER NO :....07..... 22/8/22

TA CE (YNK)

Accorded For ..25.00 Lakhs
Head of A/C....P..3796...
CER NO :....LS..... Dt:..22/8/22

TA